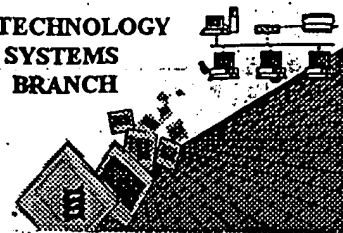J. SEHAR JEYON

BiOTECHNOLOGY
SYSTEMS
BRANCH

RUSH

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information
Center (STIC) detected errors when processing the following computer readable
form:

Application Serial Number: _09/700, 540_
Source: _1147_
Date Processed by STIC: _5-10-02_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE
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2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A
    NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
 PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
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VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
        http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is
a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the
United States Patent and Trademark Office, and instead should be sent via the following to the indicated address s:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , EFS Submission
    User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
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    U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
    Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
            Or
    U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
    2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
    Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

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Corrected Diskette Needed
See page 7

1647

RAW SEQUENCE LISTING   DATE: 05/30/2002
PATENT APPLICATION: US/09/700,590   TIME: 10:12:26

Input Set : A:\pf0526usn.seqlist.txt
Output Set: N:\CRF3\05302002\I700590.raw

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 3 <110> APPLICANT: INCYTE PHARMACEUTICALS, INC.
 4        TANG, Y. Tom
 5        LAL, Preeti
 6        HILLMAN, Jennifer L.
 7        YUE, Henry
 8        GUEGLER, Karl J.
 9        CORLEY, Neil C.
10        BANDMAN, Olga
11        PATTERSON, Chandra
12        GORGONE, Gina A.
13        KASER, Matthew R.
14        BAUGHN, Mariah R.
15        AU-YOUNG, Janice
17 <120> TITLE OF INVENTION: HUMAN TRANSMEMBRANE PROTEINS
19 <130> FILE REFERENCE: PF-0526 PCT
C--> 21 <140> CURRENT APPLICATION NUMBER: US/09/700,590
C--> 22 <141> CURRENT FILING DATE: 2001-04-16
24 <150> PRIOR APPLICATION NUMBER: 60/087,260; 60/091,674; 60/102,954; 60/109,869
W--> 25 <151> PRIOR FILING DATE: 1998-05-29; 1998-07-02; 1998-10-02; 1998-11-24
27 <160> NUMBER OF SEQ ID NOS: 158
29 <170> SOFTWARE: PERL Program
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 240
33 <212> TYPE: PRT
34 <213> ORGANISM: Homo sapiens
36 <220> FEATURE:
37 <221> NAME/KEY: misc_feature
38 <223> OTHER INFORMATION: Incyte Clone No: 153831
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44 His His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Leu
45               20                  25                  30
46 Gly Leu Ser Gly Leu Gly Leu Gly Ser Phe Leu Leu Thr His Arg
47               35                  40                  45
48 Thr Gly Leu Arg Ser Pro Asp Ile Pro Gln Asp Trp Val Ser Phe
49               50                  55                  60
50 Leu Arg Ser Phe Gly Gln Leu Thr Leu Cys Pro Arg Asn Gly Thr
51               65                  70                  75
52 Val Thr Gly Lys Trp Arg Gly Ser His Val Val Gly Leu Leu Thr
53               80                  85                  90
54 Thr Leu Asn Phe Gly Asp Gly Pro Asp Arg Asn Lys Thr Arg Thr
55               95                  100                 105
```

use separate
<150>,<151> for
each.

RAW SEQUENCE LISTING   DATE: 05/30/2002
PATENT APPLICATION: US/09/700,590   TIME: 10:12:26

Input Set : A:\pf0526usn.seqlist.txt
Output Set: N:\CRF3\05302002\I700590.raw

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56 Phe Gln Ala Thr Val Leu Gly Ser Gln Met Gly Leu Lys Gly Ser
57               110             115             120
58 Ser Ala Gly Gln Leu Val Leu Ile Thr Ala Arg Val Thr Thr Glu
59               125             130             135
60 Arg Thr Ala Gly Thr Cys Leu Tyr Phe Ser Ala Val Pro Gly Ile
61               140             145             150
62 Leu Pro Ser Ser Gln Pro Pro Ile Ser Cys Ser Glu Glu Gly Ala
63               155             160             165
64 Gly Asn Ala Thr Leu Ser Pro Arg Met Gly Glu Glu Cys Val Ser
65               170             175             180
66 Val Trp Ser His Glu Gly Leu Val Leu Thr Lys Leu Leu Thr Ser
67               185             190             195
68 Glu Glu Leu Ala Leu Cys Gly Ser Arg Leu Leu Val Leu Gly Ser
69               200             205             210
70 Phe Leu Leu Leu Phe Cys Gly Leu Leu Cys Cys Val Thr Ala Met
71               215             220             225
72 Cys Phe His Pro Arg Arg Glu Ser His Trp Ser Arg Thr Arg Leu
73               230             235             240
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80 <212> TYPE: PRT
81 <213> ORGANISM: Homo sapiens
83 <220> FEATURE:
84 <221> NAME/KEY: misc_feature
85 <223> OTHER INFORMATION: Incyte Clone No: 350629
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92               20              25              30
93 Ala Ser Pro Gln Val Thr Phe His Ser Leu Asp Gly Lys Thr Val
94               35              40              45
95 Val Cys Pro His Phe Met Gly Leu Leu Leu Gly Leu Leu Leu Leu
96               50              55              60
97 Leu Thr Leu Ser Val Arg Asn Gln Leu Cys Val Arg Gly Glu Arg
98               65              70              75
99 Gln Leu Ala Glu Thr Leu His Ser Gln Val Lys Glu Lys Ser Gln
100              80              85              90
101 Leu Ile Gly Lys Lys Thr Asp Cys Arg Asp
102              95              100
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108 <211> LENGTH: 416
109 <212> TYPE: PRT
110 <213> ORGANISM: Homo sapiens
112 <220> FEATURE:
113 <221> NAME/KEY: misc_feature
114 <223> OTHER INFORMATION: Incyte Clone No: 729171
117 <400> SEQUENCE: 3
118 Met Ser Gly His Arg Ser Thr Arg Lys Arg Cys Gly Asp Ser His
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RAW SEQUENCE LISTING   DATE: 05/30/2002
PATENT APPLICATION: US/09/700,590   TIME: 10:12:26

Input Set : A:\pf0526usn.seqlist.txt
Output Set: N:\CRF3\05302002\I700590.raw

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119    1               5                    10                   15
120 Pro Glu Ser Pro Val Gly Phe Gly His Met Ser Thr Thr Gly Cys
121              ·20                   25                   30
122 Val Leu Asn Lys Leu Phe Gln Leu Pro Thr Pro Pro Leu Ser Arg
123              35                   40                   45
124 His Gln Leu Lys Arg Leu Glu Glu His Arg Tyr Gln Ser Ala Gly
125              50                   55                   60
126 Arg Ser Leu Leu Glu Pro Leu Val Gln Gly Tyr Trp Glu Trp Leu
127              65                   70                   75
128 Val Arg Arg Val Pro Ser Trp Ile Ala Pro Asn Leu Ile Thr Ile
129              80                   85                   90
130 Ile Gly Leu Ser Ile Asn Ile Cys Thr Thr Ile Leu Leu Val Phe
131              95                   100                  105
132 Tyr Cys Pro Thr Ala Thr Glu Gln Ala Pro Leu Trp Ala Tyr Ile
133              110                  115                  120
134 Ala Cys Ala Cys Gly Leu Phe Ile Tyr Gln Ser Leu Asp Ala Ile
135              125                  130                  135
136 Gly Gly Lys Gln Ala Arg Arg Thr Asn Ser Ser Ser Pro Leu Gly
137              140                  145                  150
138 Glu Leu Phe Asp His Gly Cys Asp Ser Leu Ser Thr Val Phe Val
139              155                  160                  165
140 Val Leu Gly Thr Cys Ile Ala Val Gln Leu Gly Thr Asn Pro Asp
141              170                  175                  180
142 Trp Met Phe Phe Cys Cys Phe Ala Gly Thr Phe Met Phe Tyr Cys
143              185                  190                  195
144 Ala His Trp Gln Thr Tyr Val Ser Gly Thr Leu Arg Phe Gly Ile
145              200                  205                  210
146 Ile Asp Val Thr Glu Val Gln Ile Phe Ile Ile Ile Met His Leu
147              215                  220                  225
148 Leu Ala Val Met Gly Gly Pro Pro Phe Trp Gln Ser Met Ile Pro
149              230                  235                  240
150 Val Leu Asn Ile Gln Met Lys Ile Phe Pro Ala Leu Cys Thr Val
151              245                  250                  255
152 Ala Gly Thr Ile Phe Pro Val Thr Asn Tyr Phe Arg Val Ile Phe
153              260                  265                  270
154 Thr Gly Gly Val Gly Lys Asn Gly Ser Thr Ile Ala Gly Thr Ser
155              275                  280                  285
156 Val Leu Ser Pro Phe Leu His Ile Gly Ser Val Ile Thr Leu Ala
157              290                  295                  300
158 Ala Met Ile Tyr Lys Lys Ser Ala Val Gln Leu Phe Glu Lys His
159              305                  310                  315
160 Pro Cys Leu Tyr Ile Leu Thr Phe Gly Phe Val Ser Ala Lys Ile
161              320                  325                  330
162 Thr Asn Lys Leu Val Val Ala His Met Thr Lys Ser Glu Met His
163              335                  340                  345
164 Leu His Asp Thr Ala Phe Ile Gly Pro Ala Leu Leu Phe Leu Asp
165              350                  355                  360
166 Gln Tyr Phe Asn Ser Phe Ile Asp Glu Tyr Ile Val Leu Trp Ile
167              365                  370                  375
```

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168 Ala Leu Val Phe Ser Phe Phe Asp Leu Ile Arg Tyr Cys Val Ser
169             380             385             390
170 Val Cys Asn Gln Ile Ala Ser His Leu His Ile His Val Phe Arg
171             395             400             405
173 Ile Lys Val Ser Thr Ala His Ser Asn His His
174             410             415
177 <210> SEQ ID NO: 4
178 <211> LENGTH: 224
179 <212> TYPE: PRT
180 <213> ORGANISM: Homo sapiens
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183 <221> NAME/KEY: misc_feature
184 <223> OTHER INFORMATION: Incyte Clone No: 1273641
187 <400> SEQUENCE: 4
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191             20              25              30
192 Thr Leu Arg Asp Thr Pro Met Met Val His Thr Gly Pro Cys Cys
193             35              40              45
194 Cys Cys Cys Pro Cys Cys Gln Arg Leu Leu Leu Thr Arg Lys Lys
195             50              55              60
196 Leu Gln Leu Leu Met Leu Gly Pro Phe Gln Tyr Ala Phe Leu Lys
197             65              70              75
198 Ile Thr Leu Thr Trp Trp Ala Leu Phe Ser Ser Pro Thr Glu Ser
199             80              85              90
200 Tyr Asp Pro Ala Asp Ile Ser Glu Gly Ser Thr Ala Leu Trp Ile
201             95              100             105
202 Asn Thr Phe Leu Gly Val Ser Thr Leu Leu Ala Leu Trp Thr Leu
203             110             115             120
204 Gly Ile Ile Ser Arg Gln Ala Arg Leu His Leu Gly Glu Gln Asn
205             125             130             135
206 Met Gly Ala Lys Phe Ala Leu Phe Gln Val Leu Leu Ile Leu Thr
207             140             145             150
208 Ala Leu Gln Pro Ser Ile Phe Ser Val Leu Ala Asn Gly Gly Gln
209             155             160             165
210 Ile Ala Cys Ser Pro Pro Tyr Ser Ser Lys Thr Arg Ser Gln Val
211             170             175             180
212 Met Asn Cys His Leu Leu Ile Leu Glu Thr Phe Leu Met Thr Val
213             185             190             195
214 Leu Thr Arg Met Tyr Tyr Arg Arg Lys Asp His Lys Val Gly Tyr
215             200             205             210
216 Glu Thr Phe Ser Ser Pro Asp Leu Asp Leu Asn Leu Lys Ala
217             215             220
220 <210> SEQ ID NO: 5
221 <211> LENGTH: 247
222 <212> TYPE: PRT
223 <213> ORGANISM: Homo sapiens
225 <220> FEATURE:
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226 <221> NAME/KEY: misc_feature
227 <223> OTHER INFORMATION: Incyte Clone No: 1427389
230 <400> SEQUENCE: 5
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232  1               5                  10                    15
233 Pro Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu
234              20                  25                    30
235 Arg Val Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser
236              35                  40                    45
237 Leu Leu Leu Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr
238              50                  55                    60
239 Asp Arg Ser Asp Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly
240              65                  70                    75
241 Ala Ala Val Ser Val Leu Leu Gln Glu Val Phe Arg Phe Ala Tyr
242              80                  85                    90
243 Tyr Lys Leu Leu Lys Lys Ala Asp Glu Gly Leu Ala Ser Leu Ser
244              95                  100                   105
245 Glu Asp Gly Arg Ser Pro Ile Ser Ile Arg Gln Met Ala Tyr Val
246              110                 115                   120
247 Ser Gly Leu Ser Phe Gly Ile Ile Ser Gly Val Phe Ser Val Ile
248              125                 130                   135
249 Asn Ile Leu Ala Asp Ala Leu Gly Pro Gly Val Val Gly Ile His
250              140                 145                   150
251 Gly Asp Ser Pro Tyr Tyr Phe Leu Thr Ser Ala Phe Leu Thr Ala
252              155                 160                   165
253 Ala Ile Ile Leu Leu His Thr Phe Trp Gly Val Val Phe Phe Asp
254              170                 175                   180
255 Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu Gly Leu Val Val Gly
256              185                 190                   195
257 Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu Asn Pro Trp Tyr
258              200                 205                   210
259 Glu Ala Ser Leu Leu Pro Ile Tyr Ala Val Thr Val Ser Met Gly
260              215                 220                   225
261 Leu Trp Ala Phe Ile Thr Ala Gly Gly Ser Leu Arg Ser Ile Gln
262              230                 235                   240
263 Arg Ser Leu Leu Cys Lys Asp
264              245
268 <210> SEQ ID NO: 6
269 <211> LENGTH: 72
270 <212> TYPE: PRT
271 <213> ORGANISM: Homo sapiens
273 <220> FEATURE:
274 <221> NAME/KEY: misc_feature
275 <223> OTHER INFORMATION: Incyte Clone No: 1458357
279 <400> SEQUENCE: 6
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281  1               5                  10                    15
282 Leu Ile Cys Leu Val Thr His Leu Ile Thr Arg Glu Thr Ile Tyr
283              20                  25                    30
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/30/2002
PATENT APPLICATION: US/09/700,590   TIME: 10:12:27

     Input Set : A:\pf0526usn.seqlist.txt
     Output Set: N:\CRF3\05302002\I700590.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:23; Xaa Pos. 434
Seq#:101; N Pos. 2084,2101,2110,2128,2137,2156,2177,2226,2265,2296,2303
Seq#:101; N Pos. 2310,2325
Seq#:102; N Pos. 1346,1373,1430
Seq#:119; N Pos. 1032,1037,1042
Seq#:120; N Pos. 1893,1896,1899,1906,1911,1921,1926,1927,1928,1929,1932
Seq#:120; N Pos. 1935,1940,1948,1950,1951,1953
Seq#:134; N Pos. 814

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: **US/09/700,590**

DATE: 05/30/2002
TIME: 10:12:27

Input Set : **A:\pf0526usn.seqlist.txt**
Output Set: **N:\CRF3\05302002\I700590.raw**

<u>Use of n's or Xaa's(NEW RULES):</u>
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which
residue n or Xaa represents.

```
Seq#:23;  Xaa Pos. 434
Seq#:101; N Pos. 2084,2101,2110,2128,2137,2156,2177,2226,2265,2296,2303
Seq#:101; N Pos. 2310,2325
Seq#:102; N Pos. 1346,1373,1430
Seq#:119; N Pos. 1032,1037,1042
Seq#:120; N Pos. 1893,1896,1899,1906,1911,1921,1926,1927,1928,1929,1932
Seq#:120; N Pos. 1935,1940,1948,1950,1951,1953
Seq#:134; N Pos. 814
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VERIFICATION SUMMARY   DATE: 05/30/2002
PATENT APPLICATION: **US/09/700,590**   TIME: 10:12:27

Input Set : **A:\pf0526usn.seqlist.txt**
Output Set: **N:\CRF3\05302002\I700590.raw**

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L:21   M:270 C: Current Application Number differs, Replaced Current Application Number
L:22   M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:25   M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:1055 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:23
L:1055 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:420
L:4462 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:101
L:4507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:2040
L:4508 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:2100
L:4509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:2160
L:4510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:2220
L:4511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:2280
L:4520 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:102
L:4552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:1320
L:4553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:1380
L:5166 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:119
L:5193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:119 after pos.:1020
L:5202 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:120
L:5244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:1860
L:5245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:1920
L:5737 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:134
L:5761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:780
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